

**A NEW SPECIES OF *PHANOLINUS* SHARP (COLEOPTERA:
STAPHYLINIDAE) WITH A KEY AND COMMENTS FOR
MEXICAN SPECIES**

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Abstract.—*Phanolinus elisae*, n. sp., from México is described. A key and distribution data for all four Mexican species of *Phanolinus* are provided. A lectotype and paralectotype are designated for *P. speciosus* Sharp, 1884.

Key Words: México, Staphylinidae, *Phanolinus*

Phanolinus Sharp, 1884, is a Neotropical genus of Xanthopygina Staphylinidae consisting of 34 described species, most of which are large and beautifully colored, usually with metallic reflections. The name of one species, *P. pretiosus* Erichson, describes this character very well. The species are distributed from México to Bolivia and northern Brazil; however, the highest diversity is in South America, especially in Colombia where nine species occur (Herman 2001).

Three species have been recorded in México (Navarrete-Heredia et al. 2002), all of which were collected from two localities in Veracruz State (see comments on those species). Recently, two additional specimens (one male and one female) were collected in Jalisco State. These specimens were compared with type material held at The Natural History Museum, and I concluded that they belong to a new species that is described here. A key and comments for the Mexican species are provided.

MATERIALS AND METHODS

Throughout this paper the abdominal segments are referred by their morphologically comparable names; roman numerals

are used to refer to these. The first visible abdominal segment is segment III. Total length was measured from the anterior margin of head to apex of abdominal segment IX. Specimens are deposited in the Entomological Collection of the Centro de Estudios en Zoología, Universidad de Guadalajara (CZUG); types of the species described by Sharp (1884) are in The Natural History Museum, London (BMNH). Additional specimens examined are deposited at CNIN (Colección Nacional de Insectos, Instituto de Biología, Universidad Nacional Autónoma de México). A key for non-Mexican species of this genus was given by Scheerpeltz (1968).

***Phanolinus elisae* Navarrete-Heredia,
new species
(Figs. 1–4)**

Description.—Length, 17.6 mm. Blue violet with elytra lilac, in one abdomen appears cobalt blue. Surface covered with microsculpture consisting of waves, mixed with scattered micropunctures; a small well-defined area with isodiametric meshes at basolateral portions of abdominal segments III–VII.

Head: Subquadrate, slightly wider than

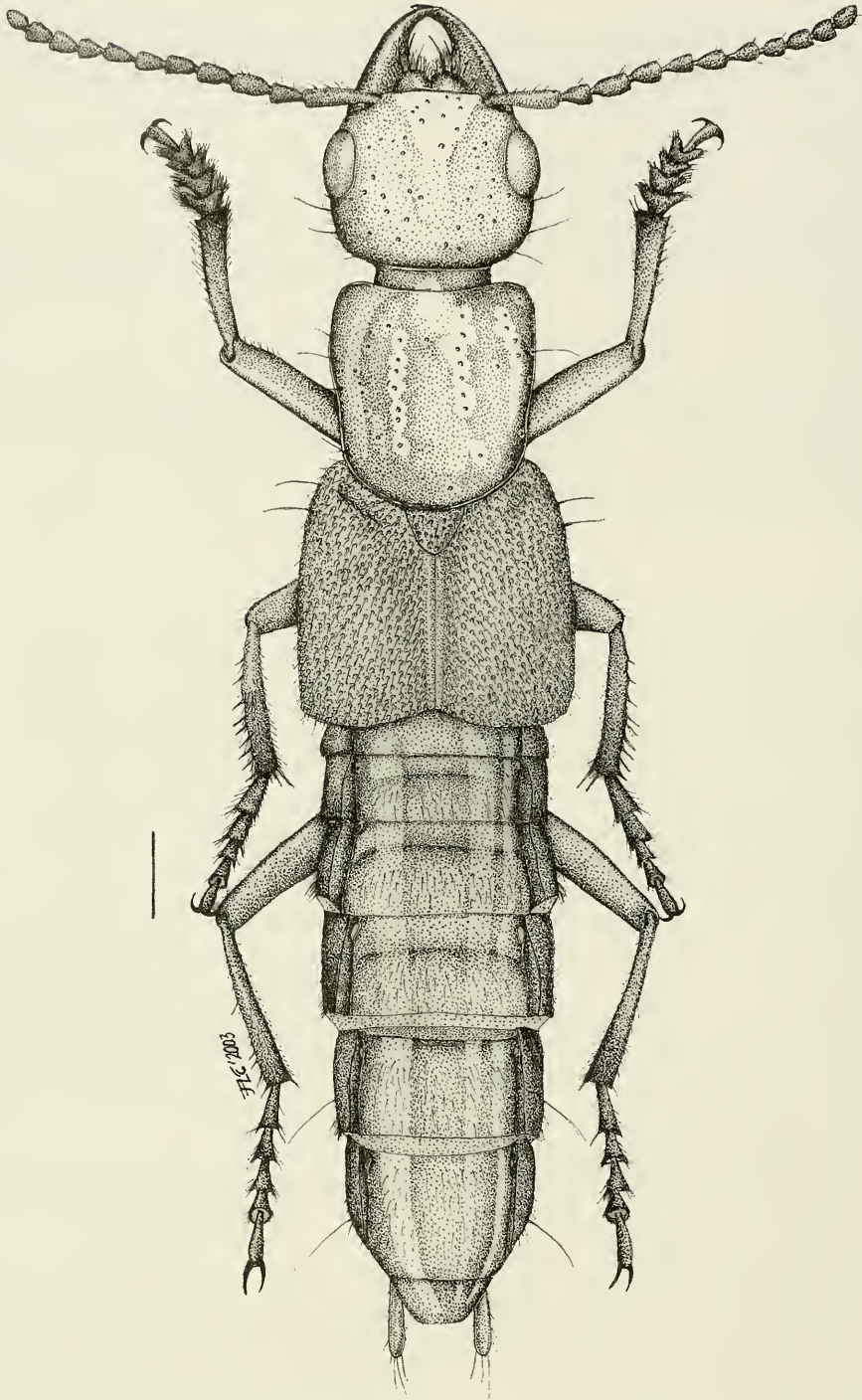
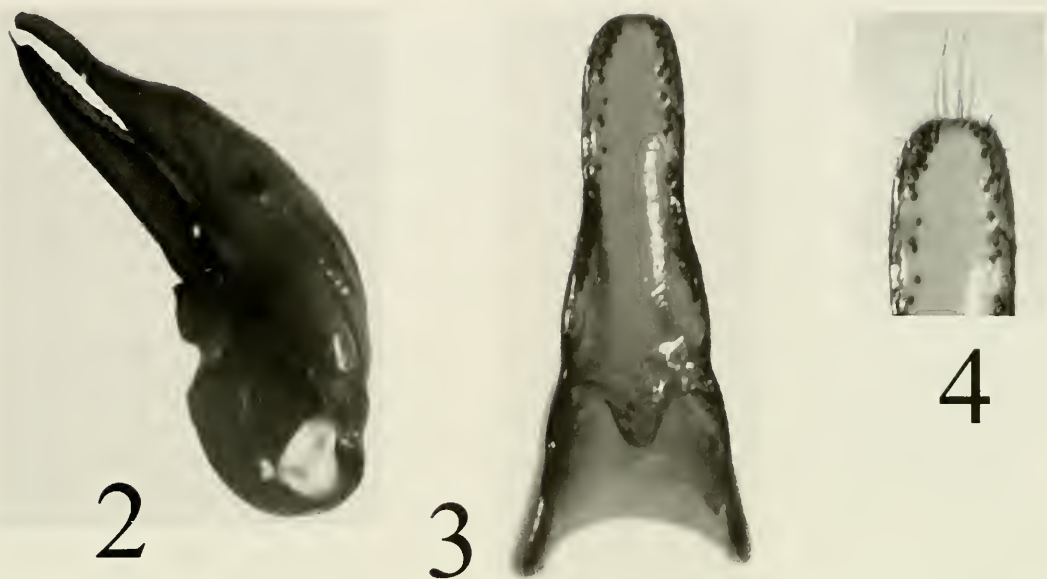


Fig. 1. *Phanolinus elisae*, holotype, dorsal view.



Figs. 2-4. *Phanolinus elisae*, male genitalia. 2, Aedeagus, lateral view. 3, Parameres, ventral view, setae removed. 4, Parameres, apex, with setae, ventral view.

long (1.09–1.12 \times ; $n = 2$); setiferous punctures denser at posterior angles and along inner borders of eyes; middle area of frons without setiferous punctures (Fig. 2). Subocular ridge well developed. First antennomere long, as long as next two antennomeres combined, second shorter than first and third. First three antennomeres with large black setae, surface shining, 4–11 with large black setae and small dense and paler setae; antennomeres 4–11 large, never transverse, decreasing in length to 10, 11 larger than 10. Last palpomeres (maxillary and labial) larger than the preceding ones, slightly paler than rest and truncate at apex that is wider in midline. Right mandible with a tooth opposite emargination of left mandible. Gular sutures separate but confluent at basal $\frac{1}{3}$. Nuchogena ridge originates in upper lateral face of neck and continues well developed to base of gena, and then remains only as a depression in genae in direction of mandible base.

Thorax: Pronotum slightly larger than head; narrower toward base; in lateral view anterior angle slightly projected below; disc with several setiferous punctures but scat-

tered, dorsal punctures 12–14 on each side, asymmetrical and not in a well-defined line; without postcoxal translucent process on hypomeron. Elytra covered densely with short black setae, setiferous punctures denser than on prothorax, with two humeral black macrosetae and one near scutellum. Two large macrosetae on anterior middle of prosternum. Tibiae with sparse spines, fewer on protibia. First four protarsomeres strongly dilated in both sexes, with modified pale setae ventrally; last tarsomere as long as previous three tarsomeres combined. Middle and hind tarsomeres 2–4 moderately dilated and ventrally lobed (but less than protarsomeres).

Abdomen: Segments shining; tergites III–V with impressed line on basal portion, less evident on tergite V. Pubescence fine, scattered, setiferous punctures not as deep as elytral punctures. Sternite VIII of male emarginated with three black macrosetae on each side. Sternite IX emarginate, with two black macrosetae. Aedeagus as in Figs 2–4. Parameres with apex almost reaching apex of median lobe (Fig. 2), peg setae

more abundant near apex (Figs. 3–4), apex of parameres with four large setae (Fig. 4).

Material examined.—Holotype male: México: Jalisco, Autlán, Puerto los Mazos, BMM, 1,800 m, 13.IX.1999, 19°41.3'N, 104°23.7'W, J.L. Navarrete-Heredia col., *Phanolinus?* *gravidus* Shp., J.L. Navarrete-Heredia det., and my holotype label: HOLOTYPE, *Phanolinus elisae* Navarrete-Heredia, des. Navarrete-Heredia 2002 (CZUG). Paratype: 1 ♀, same data as holotype, except: yellow label: PARATYPE, *Phanolinus elisae* Navarrete-Heredia, des. Navarrete-Heredia 2002 (CZUG).

Etymology.—This species is dedicated to my daughter, Elisa Margarita, as the “beautiful” lady that she is to me and to my family.

Remarks.—*Phanolinus elisae* is close to *P. speciosus* Sharp and *P. gravidus* Sharp all of which have a similar color pattern; however, *P. elisae* is easily recognized by the basal transverse impressions on tergites III–V. *Phanolinus speciosus* lacks these impressions, and in *P. gravidus* they are present as restricted discrete impressions only on the lateral portions of tergites III–IV. Also, there are more than 14 pronotal punctures in *P. speciosus* and only nine in *P. gravidus*, whereas in *P. elisae* are 12–14. The abdomen in *P. speciosus* is mostly dull due to the meshed micro sculpture, and the iridescent portions are restricted to the central area of the tergites. In *P. elisae*, the abdomen is mostly shining.

COMMENTS ON THE MEXICAN SPECIES OF *PHANOLINUS*

Phanolinus obsoletus Sharp, 1884: 364

This species was described from one specimen collected in México without specific locality. No biological information is available. The type specimen is labeled (on card, handwritten): *Phanolinus obsoletus*, Type D.S., Mexico, Coll. Guerin-Men., aeodeagus dissected and mounted on card/circle with red border, printed: Type/B.C.A. Col. I.2, *Phanolinus obsoletus*, Sharp/

Sharp Coll. 1905–313. As this species was described from a single specimen, I added a red holotype label: HOLOTYPE, *Phanolinus flohri* Sharp, teste. J.L. Navarrete-Heredia 2002. Later, Sharp (1887: 784) cited another specimen from Xalapa, Veracruz. The label data for that specimen is: Jalapa, Mexico, Hoege/B.C.A. Col. I.2, *Phanolinus obsoletus*, Sharp/ handwritten: *Phanolinus obsoletus* Sharp, ♀.

Phanolinus flohri Sharp, 1884: 364

This species was described from one specimen collected in Xalapa, Veracruz. No biological information is available. The type specimen is labeled (on card, handwritten): ♀, *Phanolinus flohri*, Type D.S., Jalapa ex Almolonga, Mex., Flohr/ circle with red border, printed: Type/B.C.A. Col. I.2, *Phanolinus flohri*, Sharp/ Sharp Coll. 1905–313. As this species was described from a single specimen, I added a red holotype label: HOLOTYPE, *Phanolinus flohri* Sharp, teste. J.L. Navarrete-Heredia 2002.

Additional specimens examined.—Veracruz, Naolinco, 1.XI.1975, G. Figueroa, *Phanolinus flohri* Shp., J.L. Navarrete-Heredia det. 2003 (1 ♀: CNIN); Xalapa, 7.XII.1980, J. Llorente, leg. A. Luis, *Phanolinus flohri*, J.L. Navarrete-Heredia det. (1 ♂: CZUG).

Phanolinus speciosus Sharp, 1884: 367

This species was described from two specimens (syntypes), a male and a female, both collected in Cordoba, Veracruz. No biological information is available. One specimen is labeled (on card, handwritten): ♂, *Phanolinus speciosus*, Type D.S., Cordova, Mexico, Sallé/circle with red border, printed: Type/ B.C.A. Col. I.2, *Phanolinus speciosus*, Sharp/ Sharp Coll. 1905–313. I select this specimen as lectotype to ensure an accurate application of this name. A red label with my lectotype designation is attached: LECTOTYPE, *Phanolinus speciosus* Sharp, des. J.L. Navarrete-Heredia 2002. The female is designated a paralect-

otype and has the following label data (on card, handwritten): ♀, *Phanolinus speciosus*, Type D.S., Cordova, Mexico/ circle with red border, printed: Type/ B.C.A. Col. I.2, *Phanolinus speciosus*, Sharp, and my yellow paralectotype label: PARALECTO-TYPE: *Phanolinus speciosus* Sharp, des. J.L. Navarrete-Heredia 2002.

DISCUSSION

The known distribution of the Mexican *Phanolinus* species is scattered and restricted primarily to Veracruz State, due primarily to the fieldwork efforts on that area; however, their presence in Jalisco considerably increases our knowledge of their distribution and agrees with patterns observed in other Xanthopygina, such as species of *Xenopygus* and *Xanthopygus* (Navarrete-Heredia et al. 2002; Navarrete-Heredia 2004) known to occur in Sinaloa, Nayarit, and or Jalisco in western México. It is possible that more specimens will be found in other tropical localities of the Pacific coast and Veracruz and possibly in San Luis Potosí due to similar climatic conditions and vegetation types.

KEY TO MEXICAN *PHANOLINUS*

- 1. Tergites III–V without transverse basal impressions *P. speciosus*
- Tergites III–V or only tergite III with transverse basal depressions; in *P. gravidus* restricted as discrete impressions on lateral portions of tergites III–IV 2
- 2. With 12–14 pronotal dorsal setiferous punctures; head, pronotum and abdomen blue violet *P. elisae*
- With less than 10 pronotal dorsal setiferous punctures; head, pronotum and abdomen gold-

- en coppery, bright colored, never blue violet 3
- 3. With 4 widely separated pronotal dorsal setiferous punctures, distributed on no more than 2/3 of pronotal length *P. flohri*
- With 6–8 pronotal dorsal setiferous punctures, some widely separated, others close together, distributed close to basal border of pronotum *P. obsoletus*

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